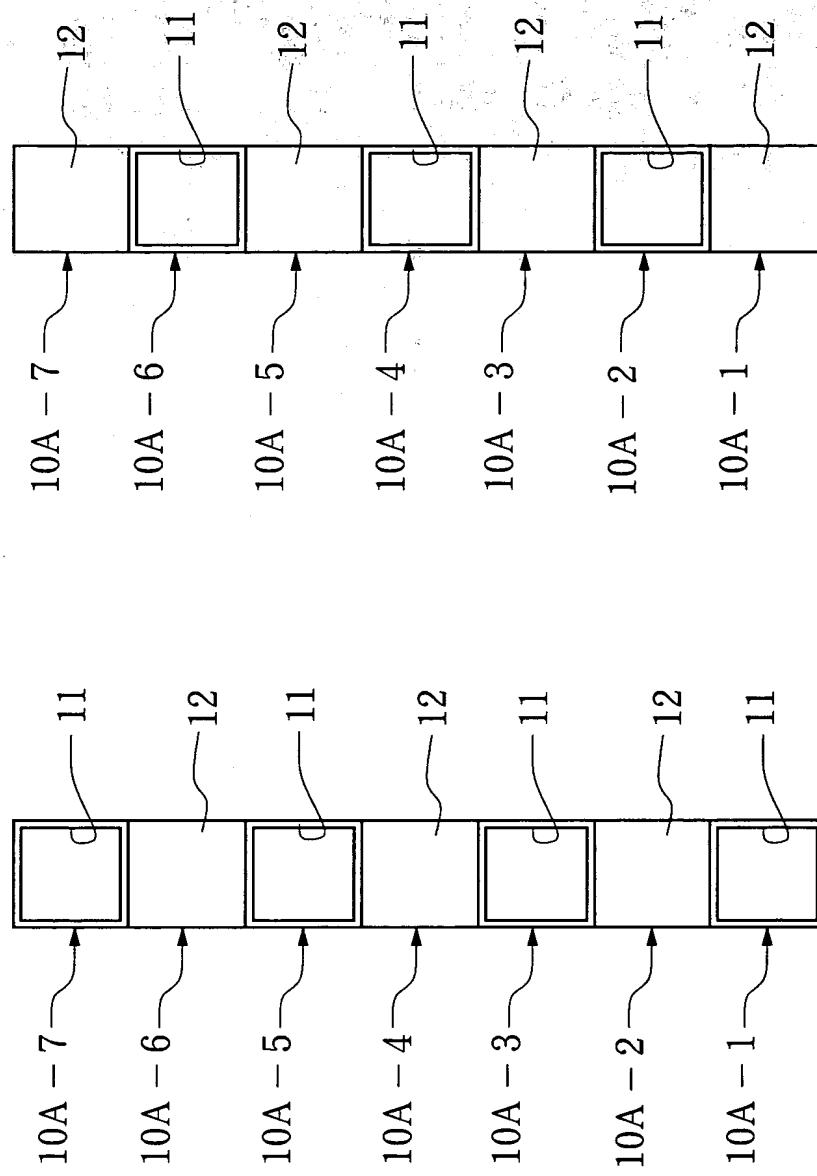
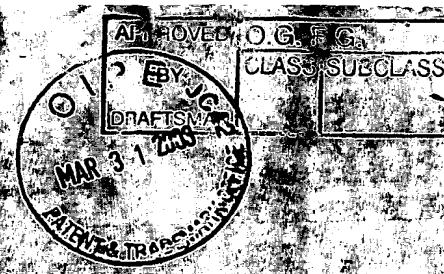


5 : SOUND RADIATING STRUCTURE

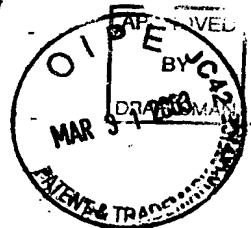


5 : SOUND RADIATING
STRUCTURE

FIG. 2

5 : SOUND RADIATING
STRUCTURE

FIG. 3



D.G. FIG.
CLAS. SU2CLASS

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FIG. 4 (A)

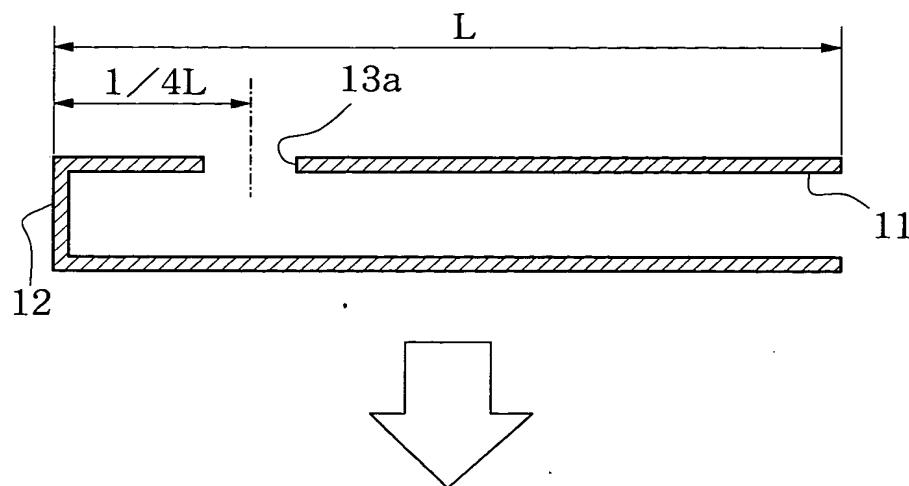
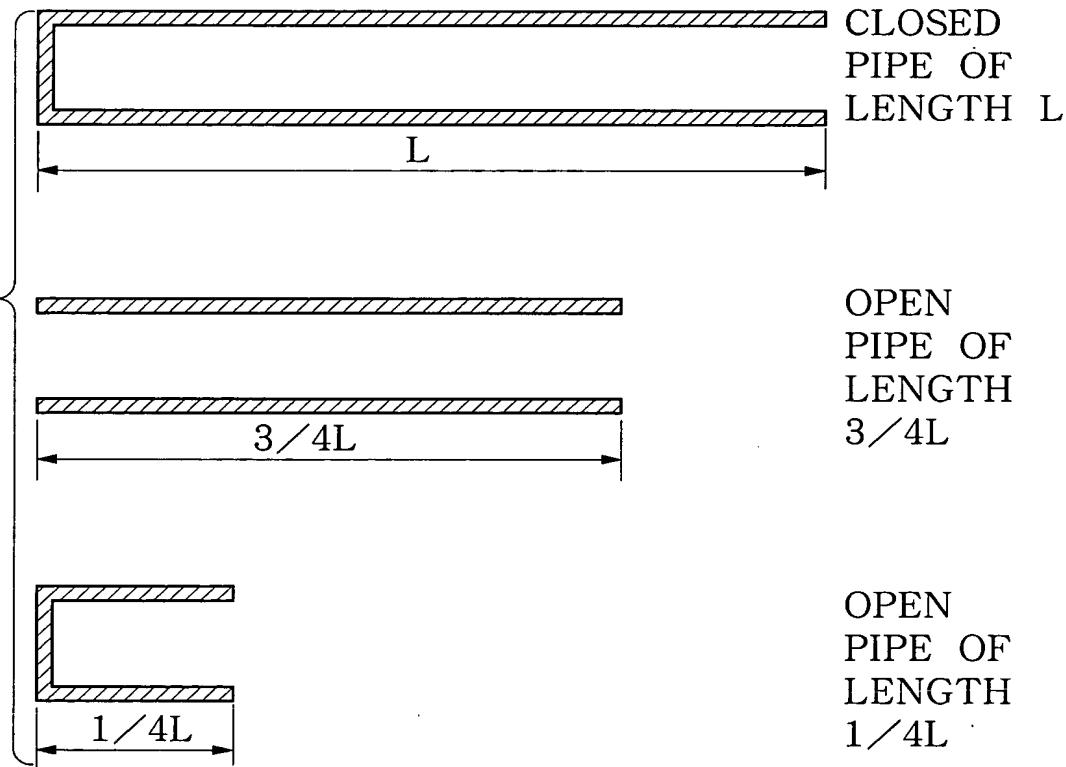
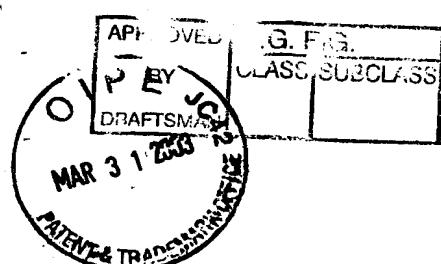


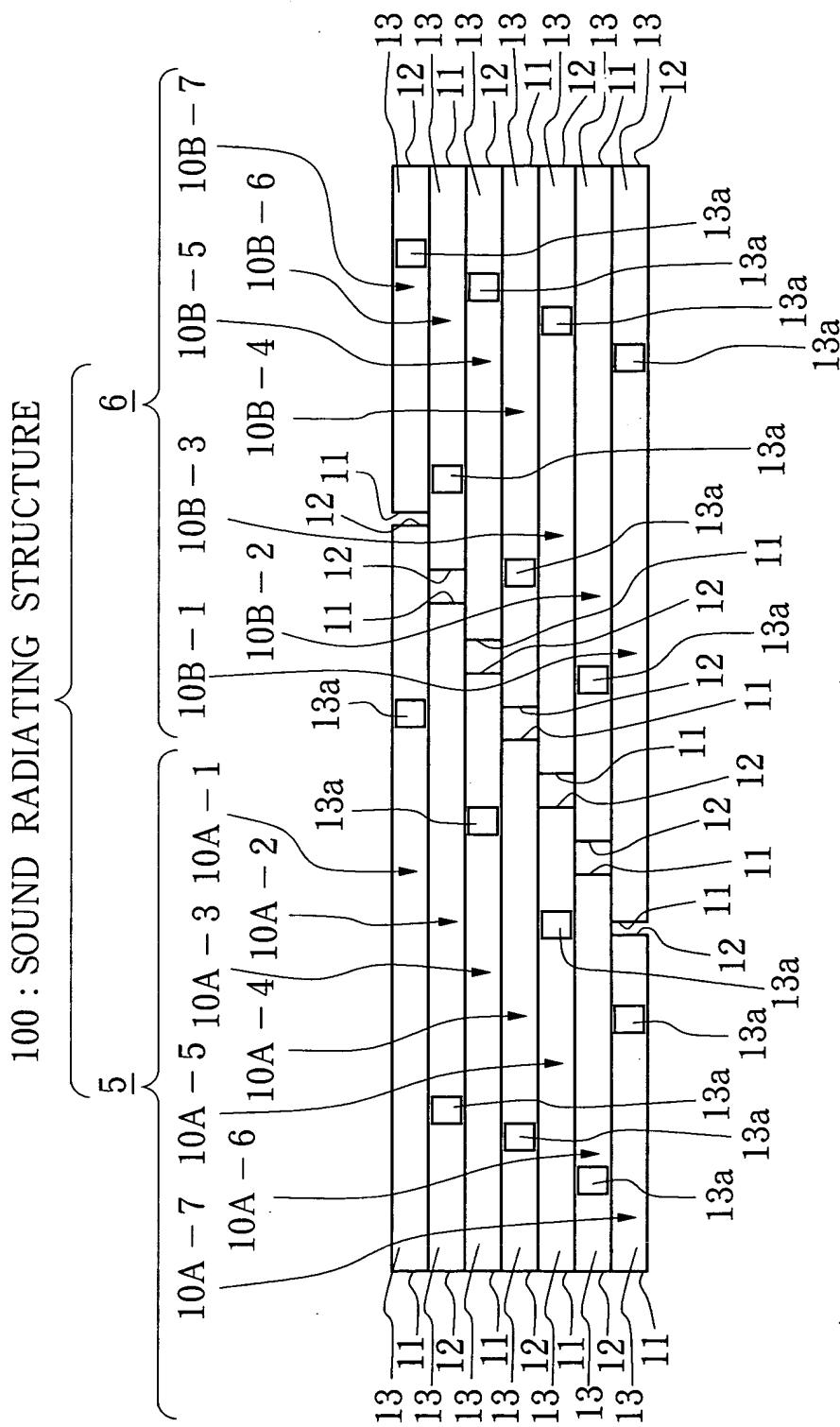
FIG. 4 (B)

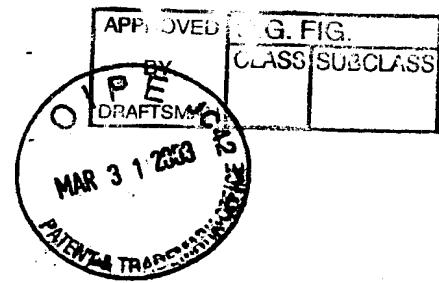




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FIG. 5





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FIG. 6

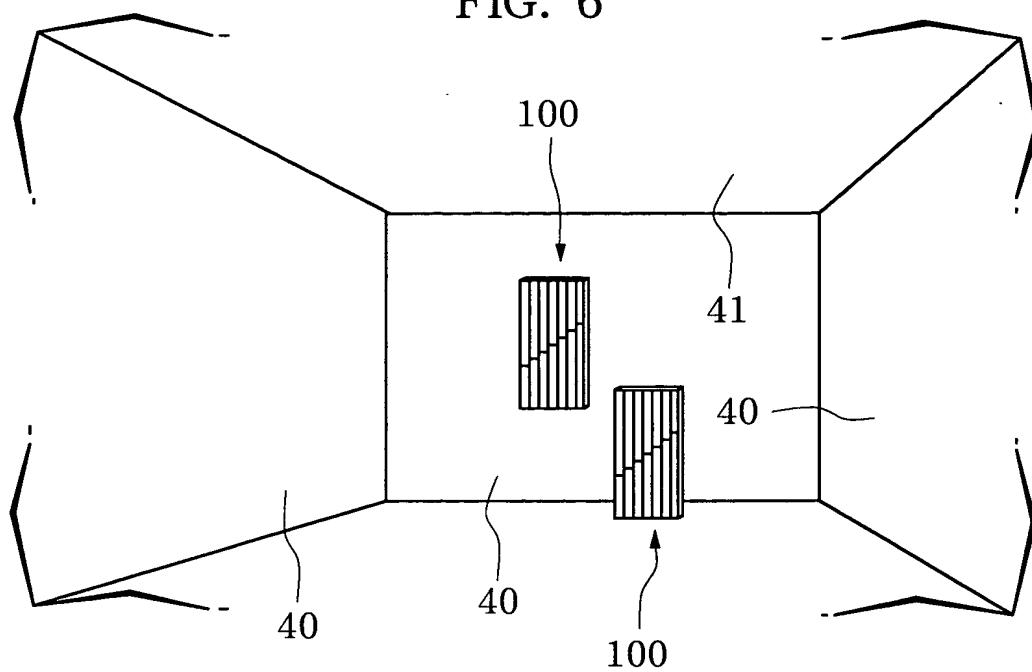
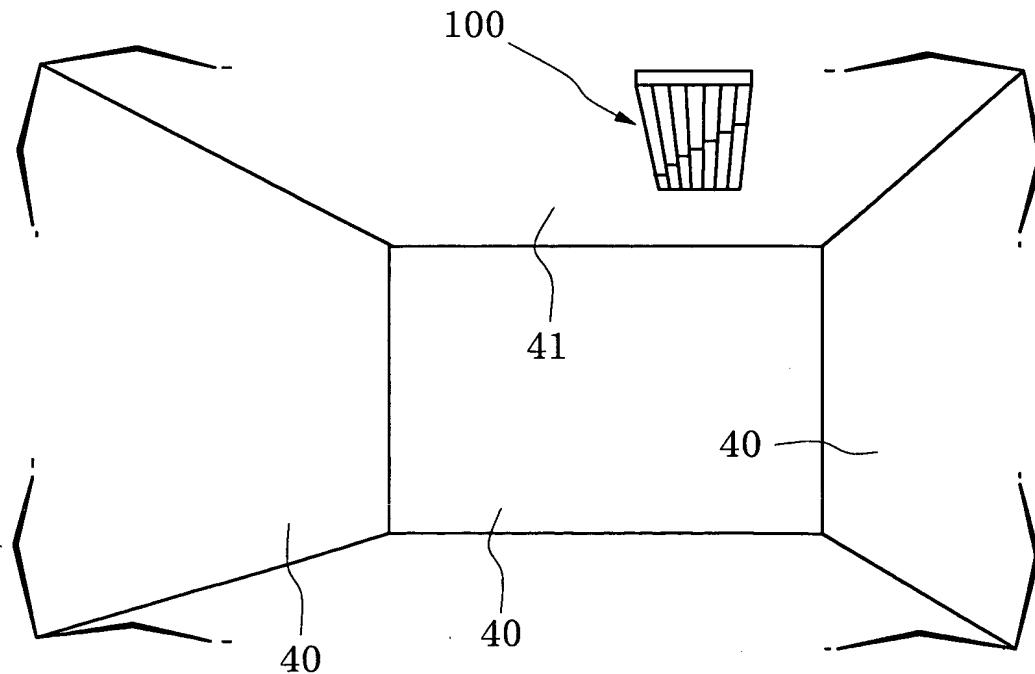
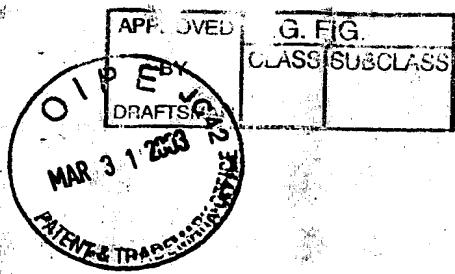


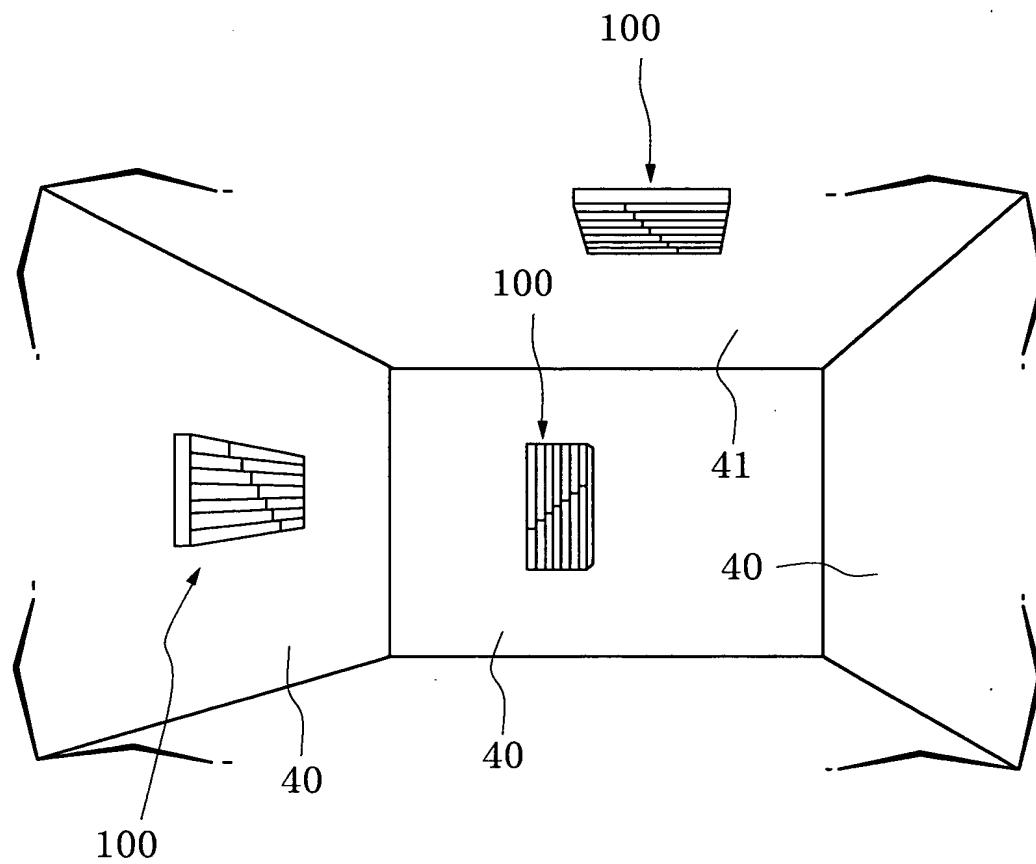
FIG. 7

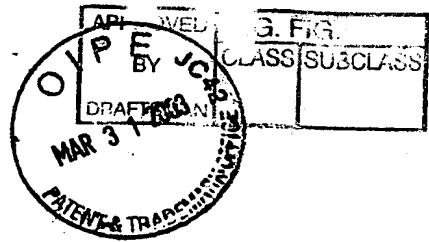




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FIG. 8

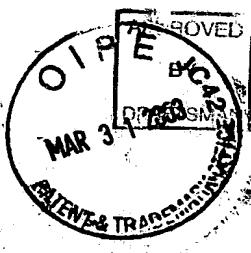




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PIPE NO	A1	B1	A2	B2	A3	B3	A4	B4	A5	B5	A6	B6	A7	B7
LENGTH L (mm)	895	850	800	760	720	680	640	605	565	530	500	470	445	425
f (Hz)	95	100	106	112	118	125	133	140	150	160	170	181	191	200
f - S (Hz)	380	400	425	447	472	500	531	562	602	642	680	723	764	800
f - L (Hz)	253	267	283	298	315	333	354	375	401	428	453	482	509	533

FIG. 9



O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN
PATENTS & TRADEMARKS

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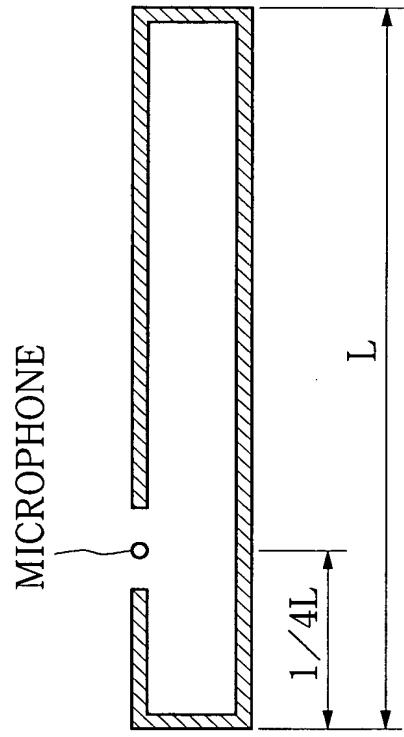


FIG. 10A

PIPE NO	A1	B1	A2	B2	A3	B3	A4	B4	A5	B5	A6	B6	A7	B7
f-L(Hz)	127	133	142	149	157	167	177	187	201	214	227	241	255	267
MEASURED VALUE f1(Hz)	120	135	140	145	150	180	190	180	185	210	225	225	230	235
MEASURED VALUE f2(Hz)	350	350	360	395	390	410	445	490	515	500	510	570	550	610
MEASURED VALUE f3(Hz)	850	1000	1100	1200	1000	1100	1350	1250	1600	1000	1400	1500	1200	1800

FIG. 10B



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FIG. 11A

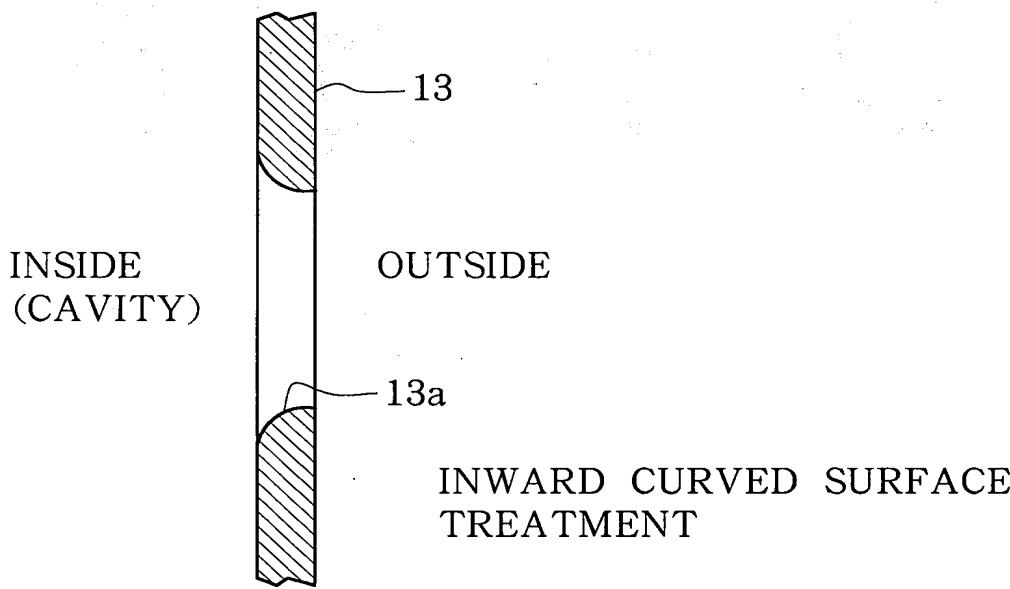
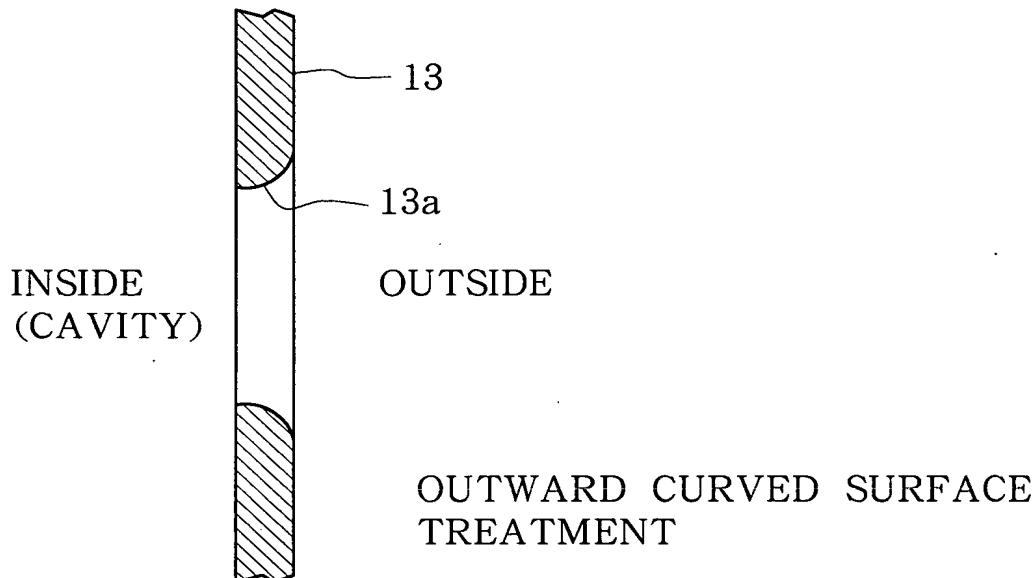
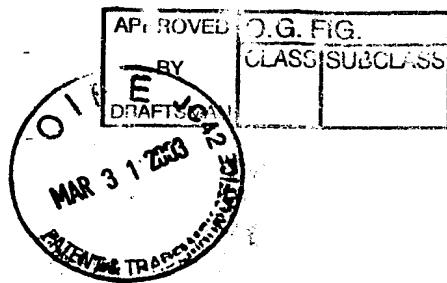


FIG. 11B



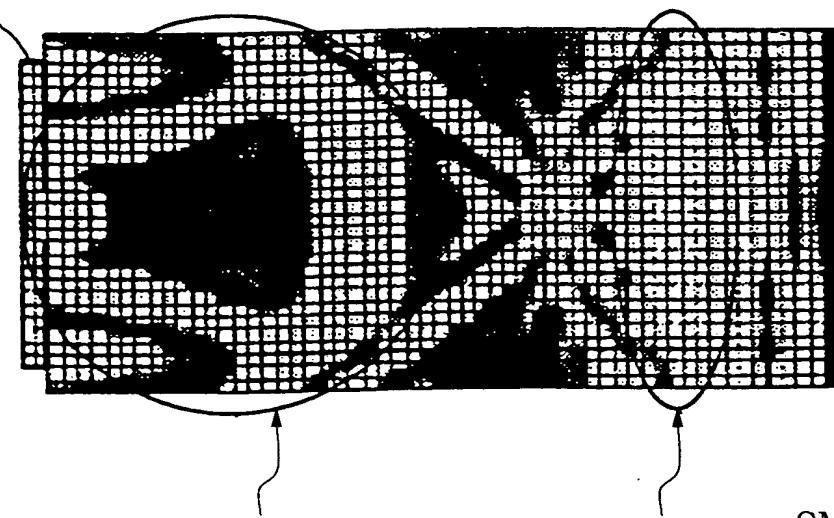


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FIG. 12

SOUND
PRESSURE
GREAT

100



GREAT ENERGY OF
RE - RADIATED SOUND

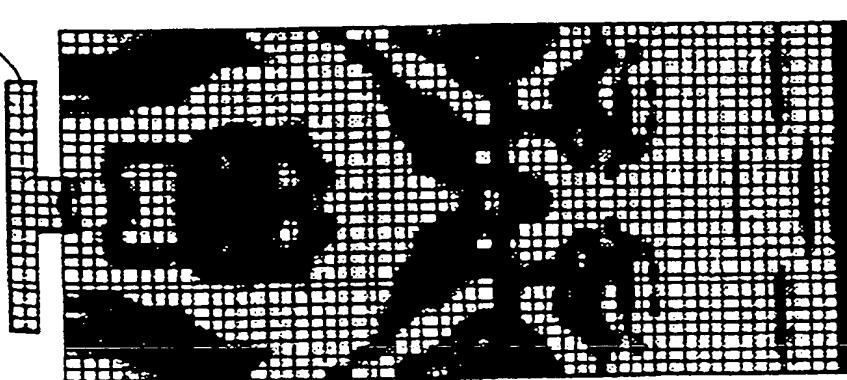
GREAT SCATTERING

SMALL

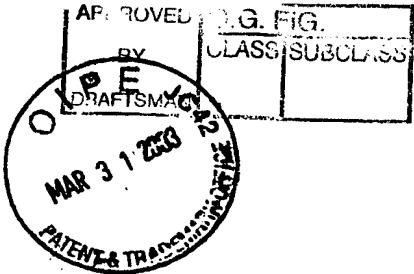
SOUND
PRESSURE
GREAT

FIG. 13

100



SMALL



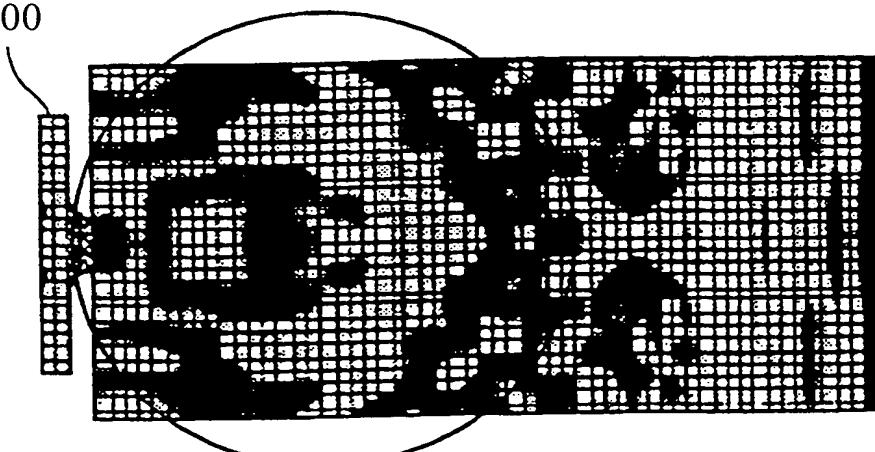
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FIG. 14

SOUND
PRESSURE

GREAT

100



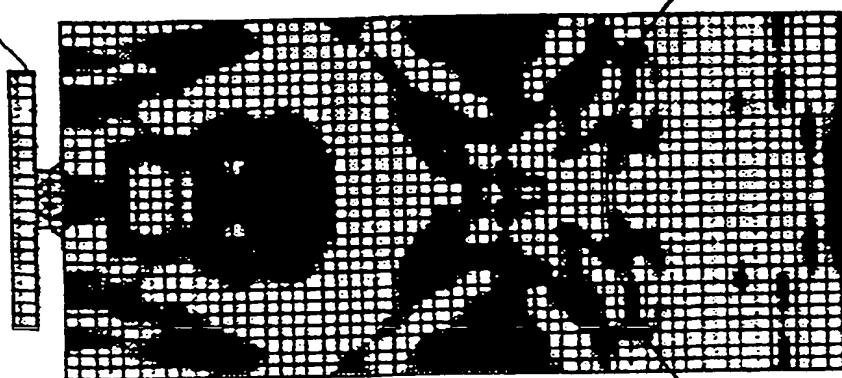
SMALL

SOUND
PRESSURE

FIG. 15

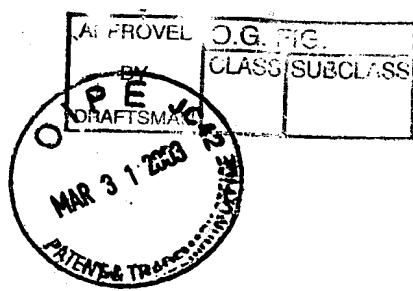
GREAT

100



SMALL

GREAT
SCATTERING

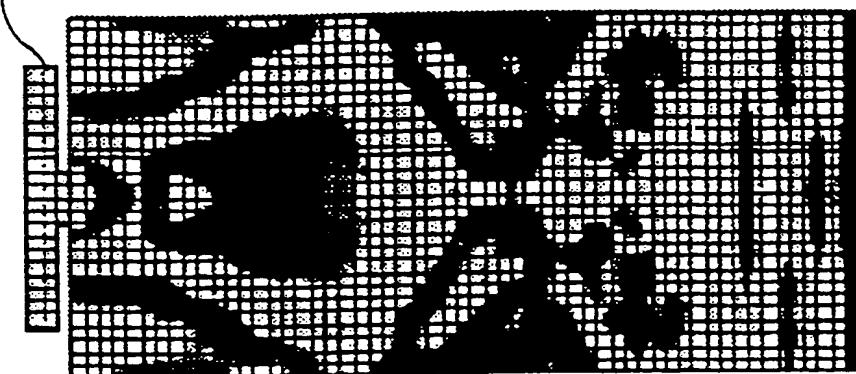


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FIG. 16

SOUND
PRESSURE
GREAT

100

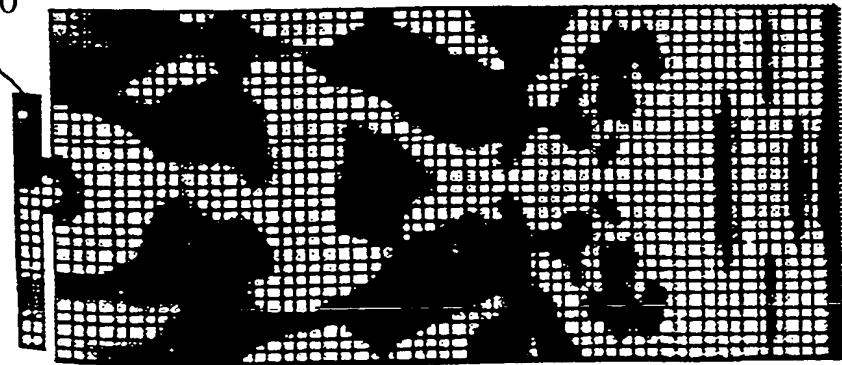


SMALL

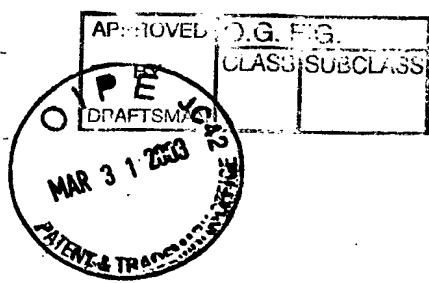
FIG. 17

SOUND
PRESSURE
GREAT

100



SMALL



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FIG. 18

SOUND
PRESSURE
GREAT

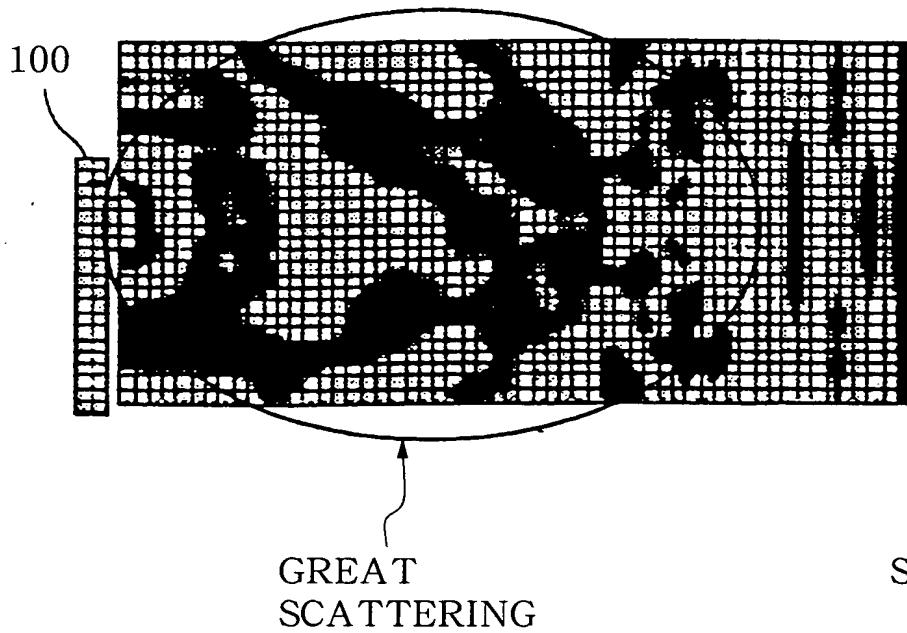
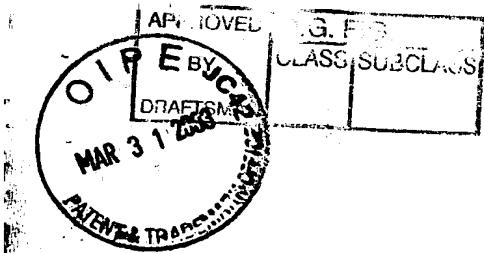


FIG. 19

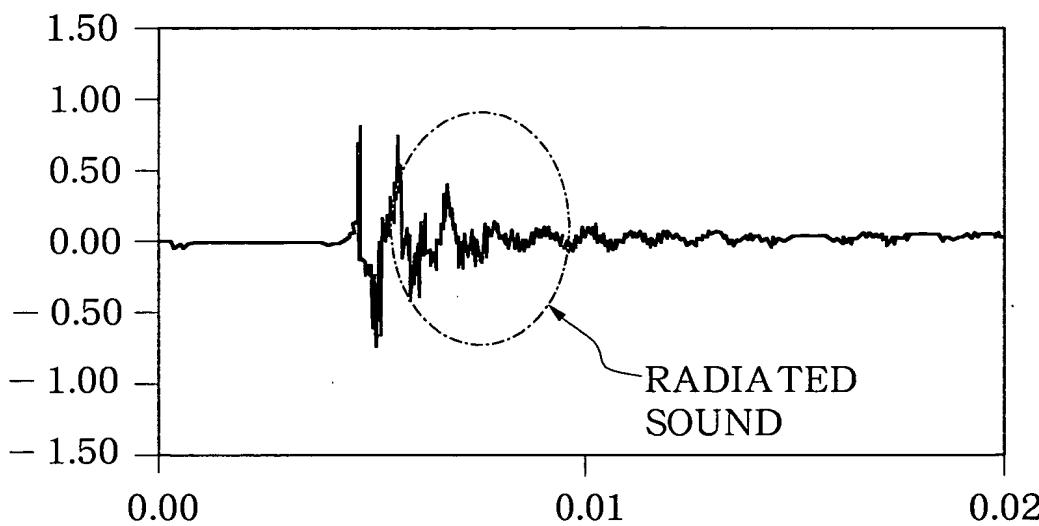
SOUND
PRESSURE
GREAT





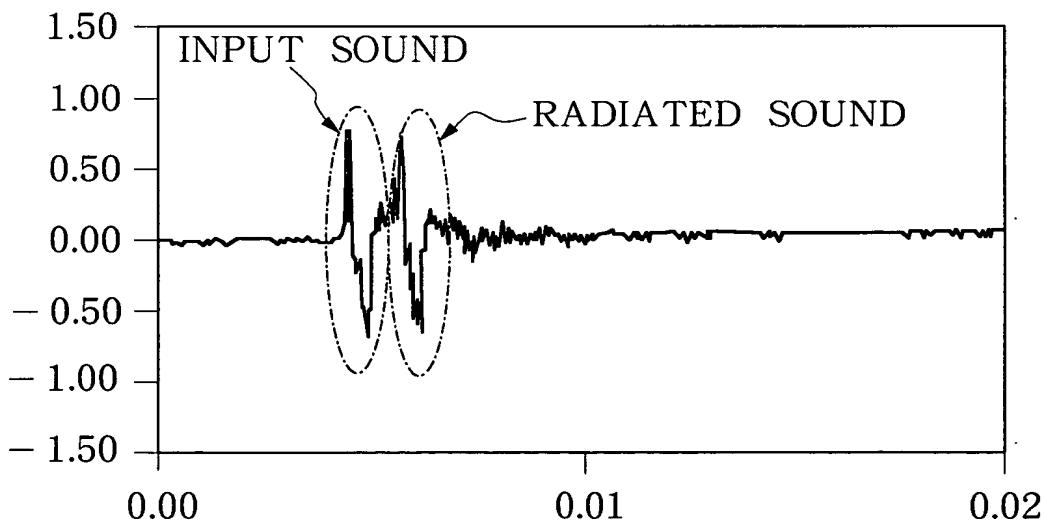
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FIG. 20



WITH SOUND RADIATING STRUCTURE

FIG. 21



WITHOUT SOUND RADIATING STRUCTURE

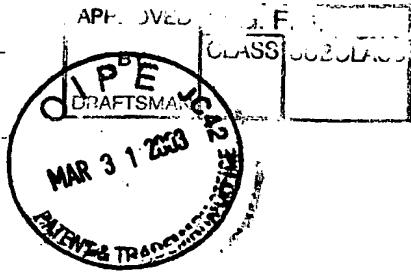
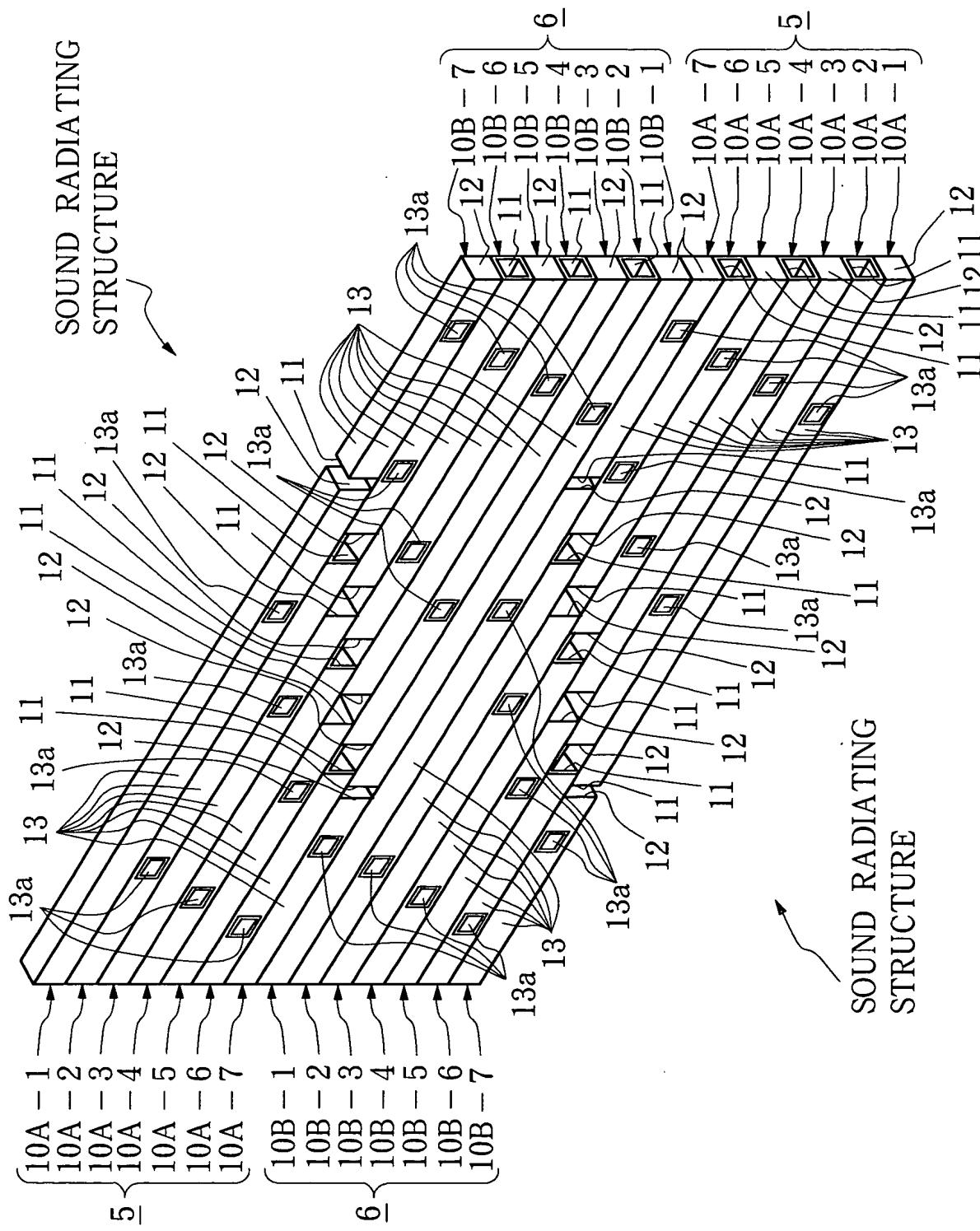
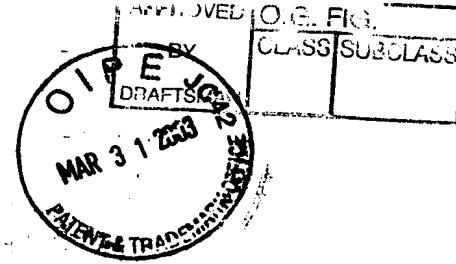


FIG. 22





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FIG. 23

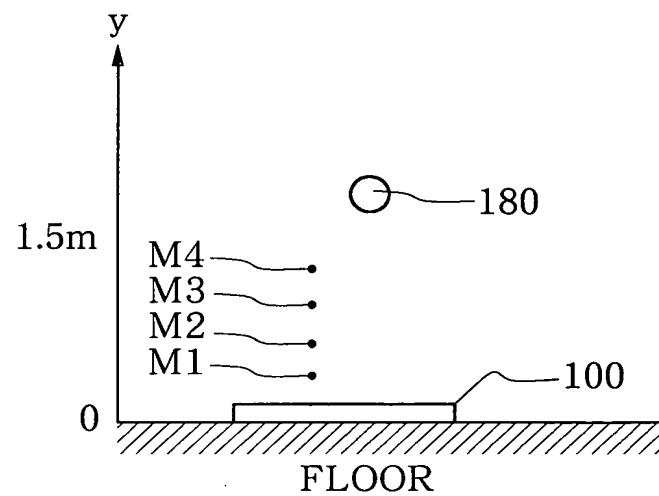
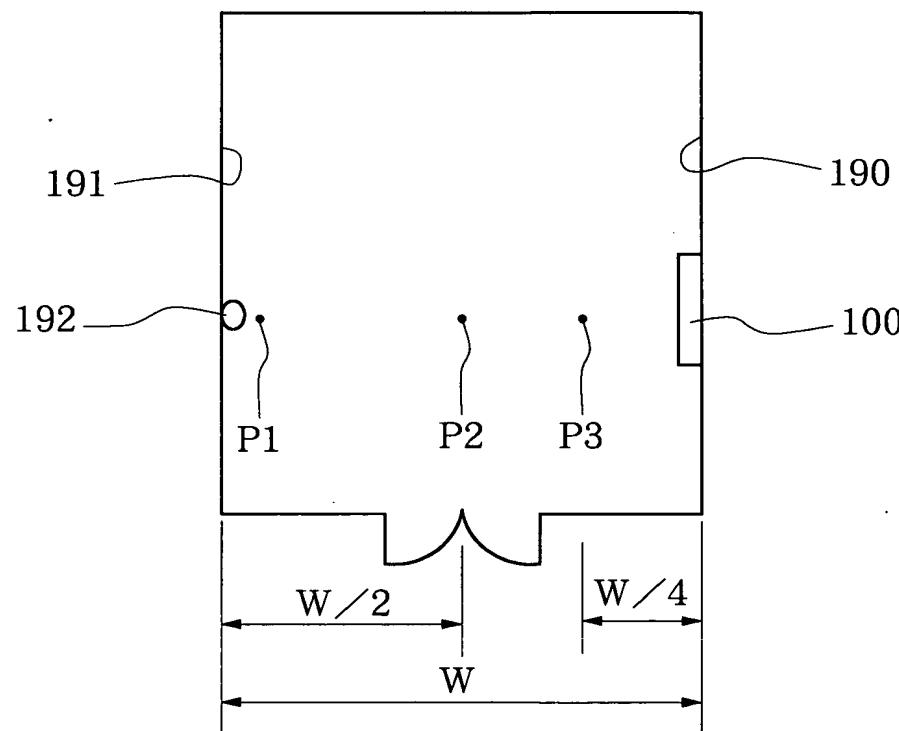


FIG. 24

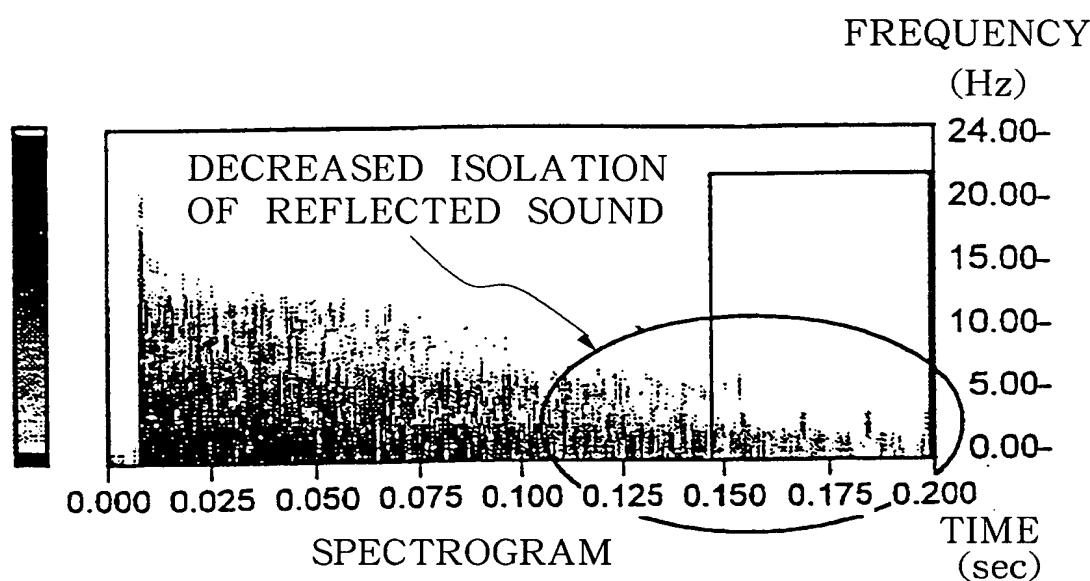




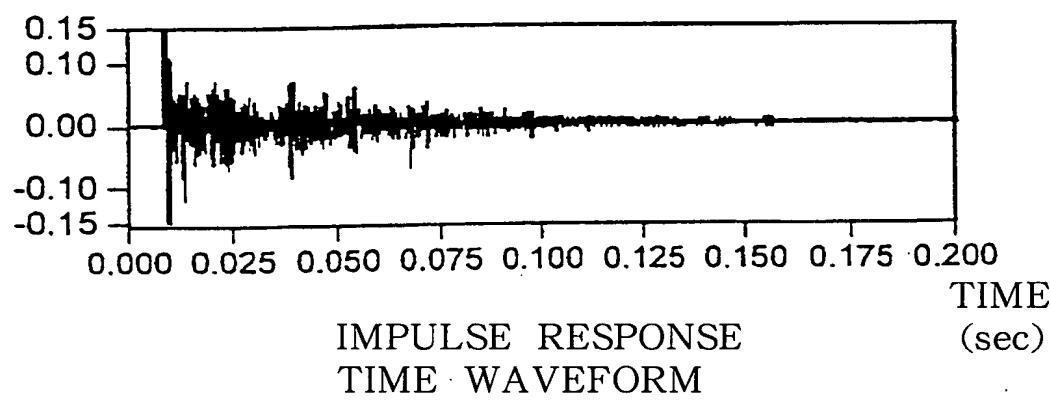
APPROVED
O.G. FIG.
CLASS SUBCLAS.
DRAFSMAN
O.I.P.E.
MAR 31 1968
PATENT & TRADEMARK OFFICE

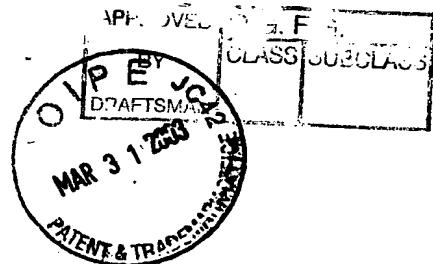
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FIG. 25



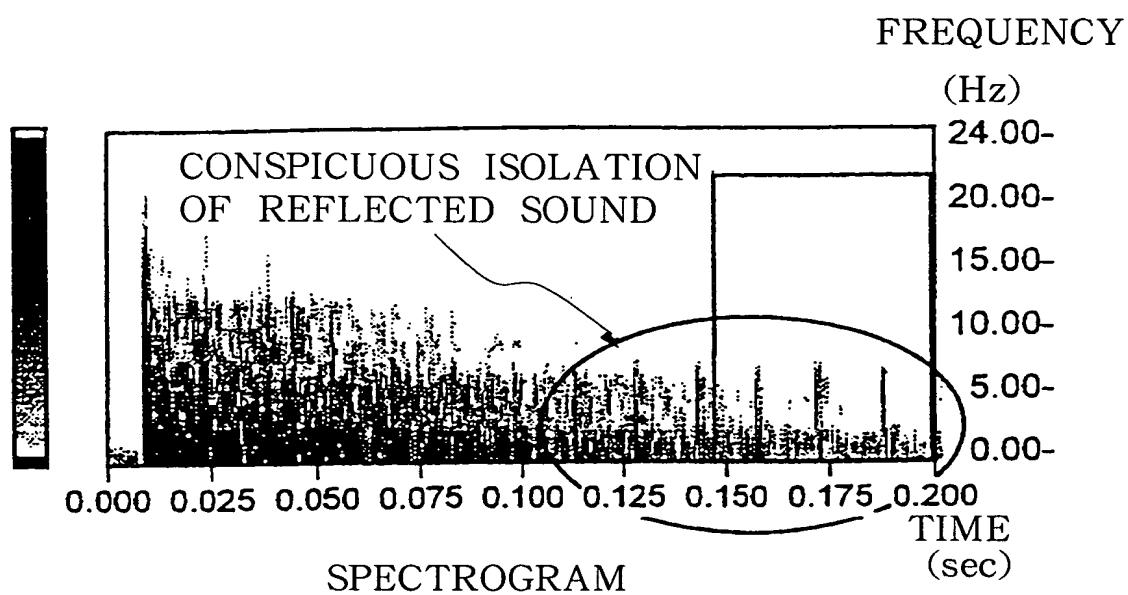
IMPULSE RESPONSE



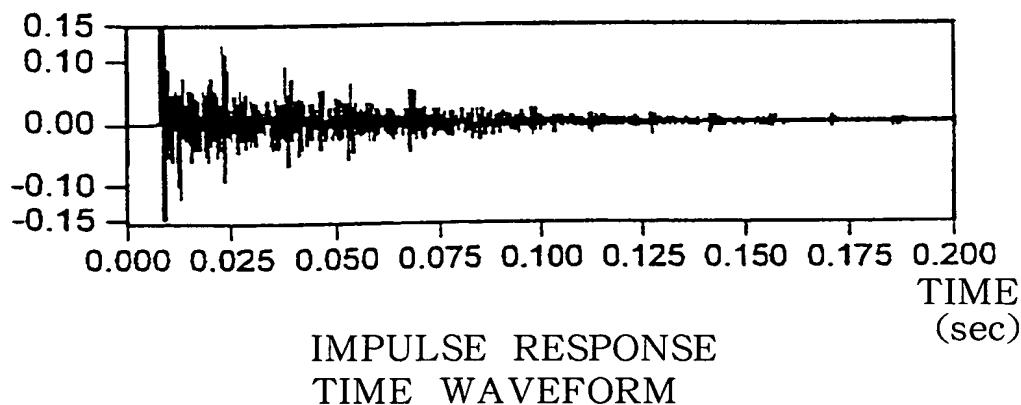


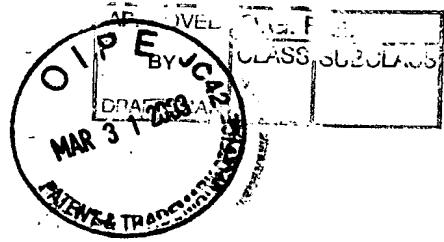
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FIG. 26



IMPULSE RESPONSE





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FIG. 27

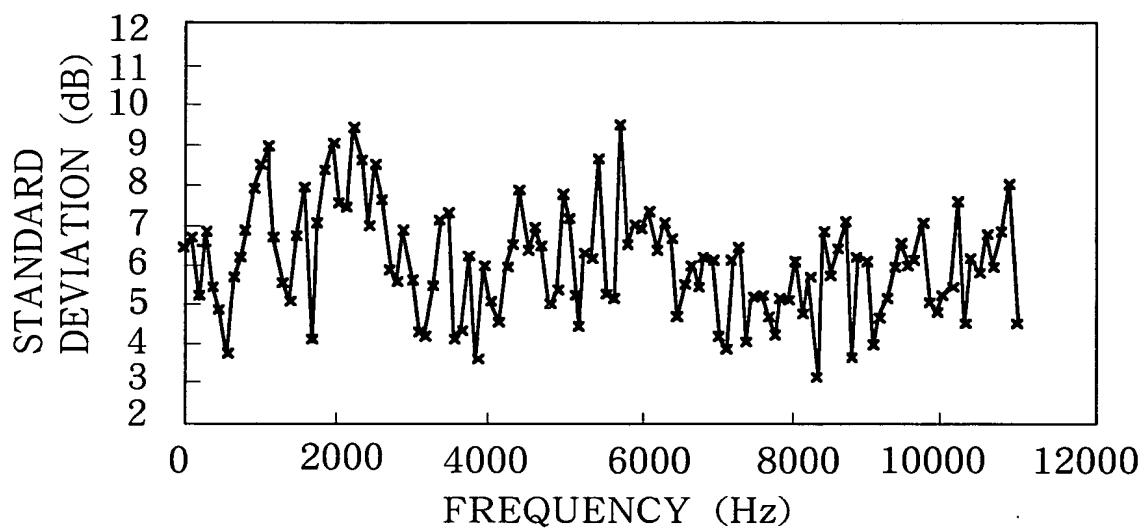
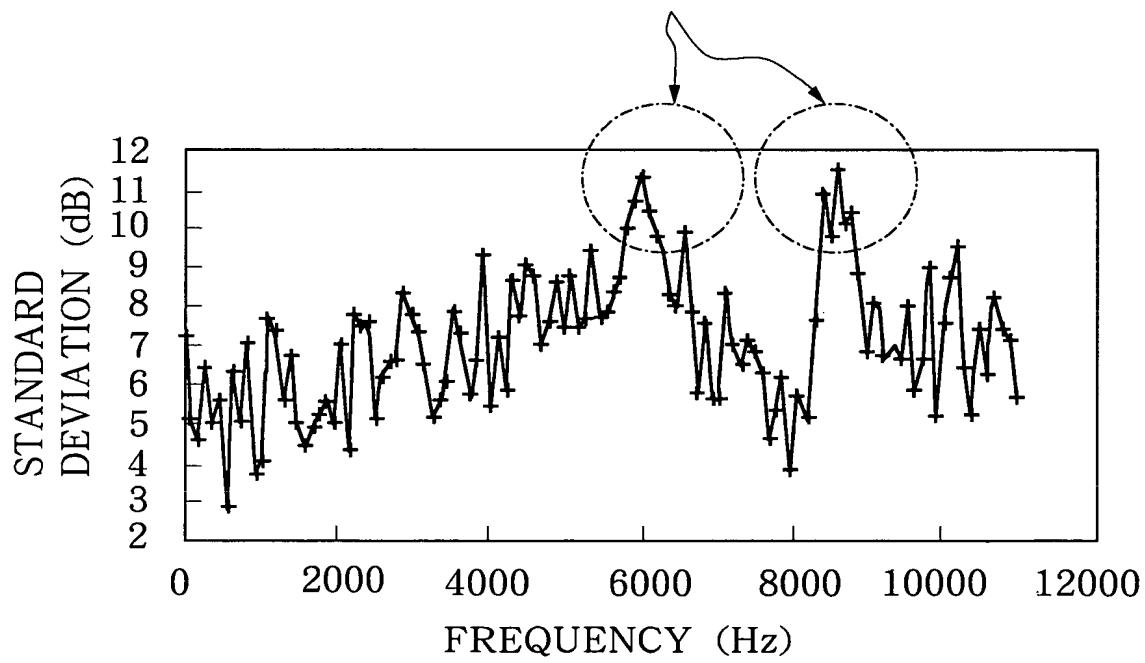
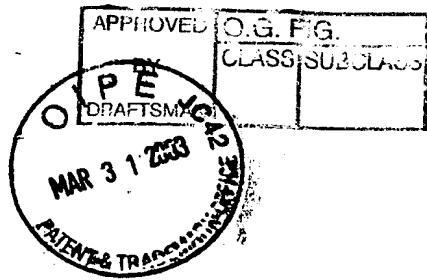


FIG. 28

GREAT DEVIATION





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FIG. 29

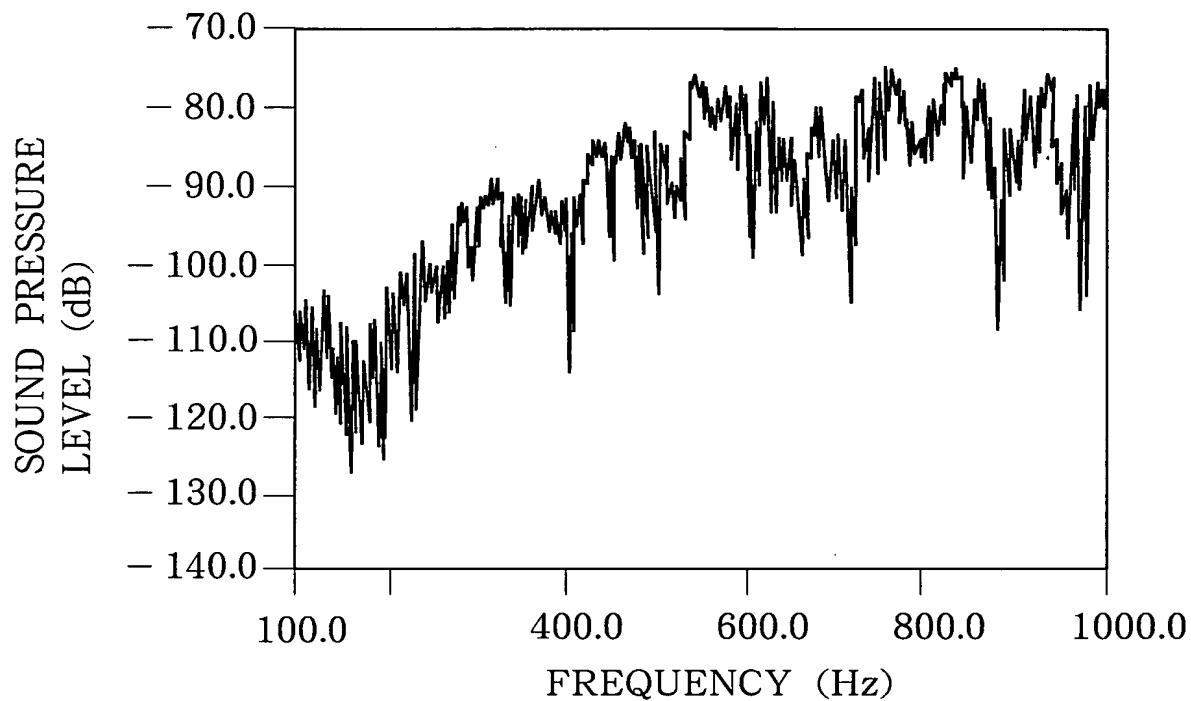
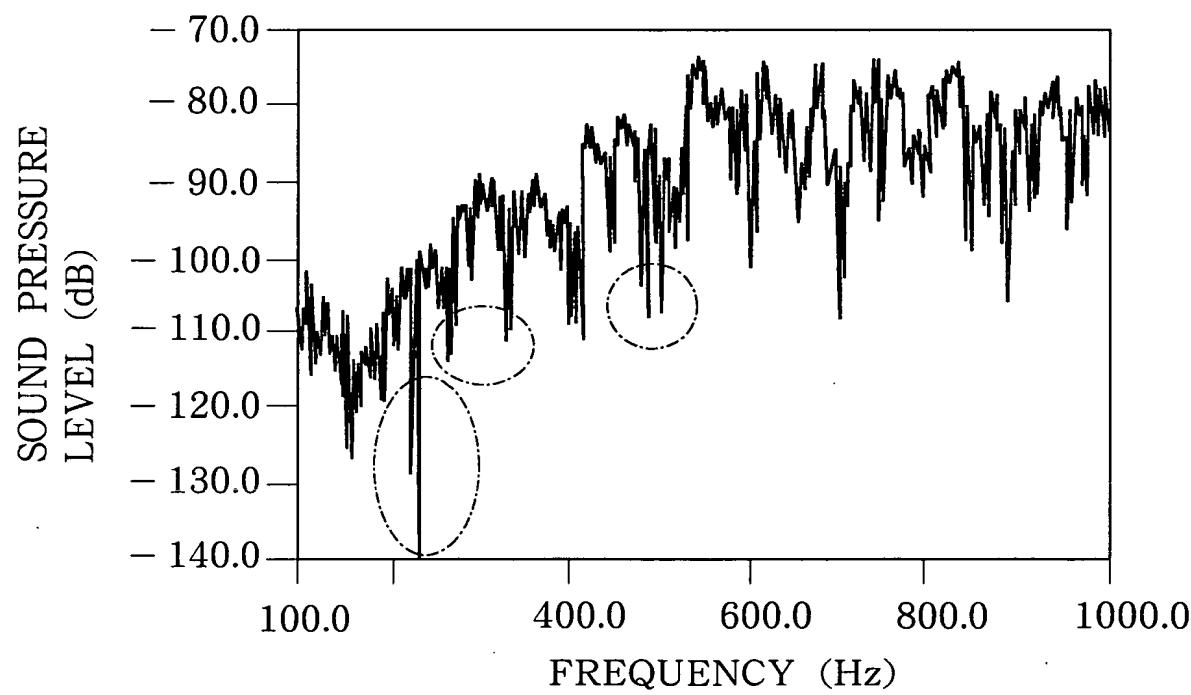
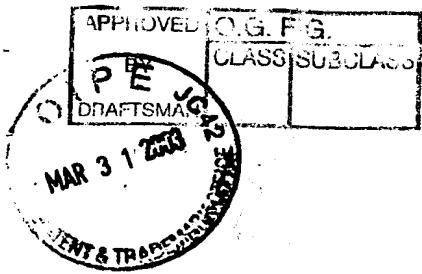


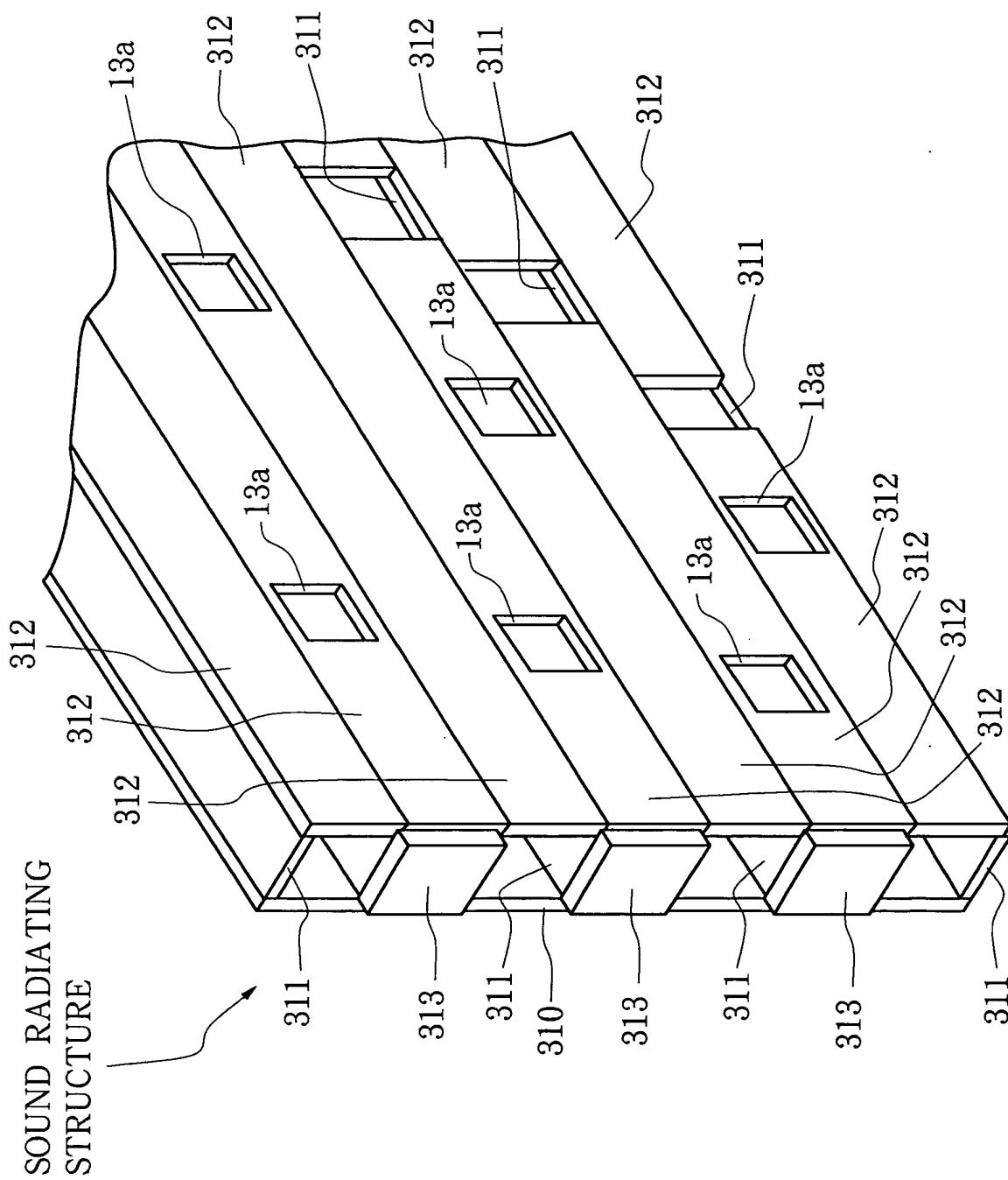
FIG. 30

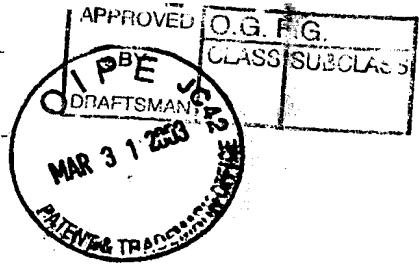




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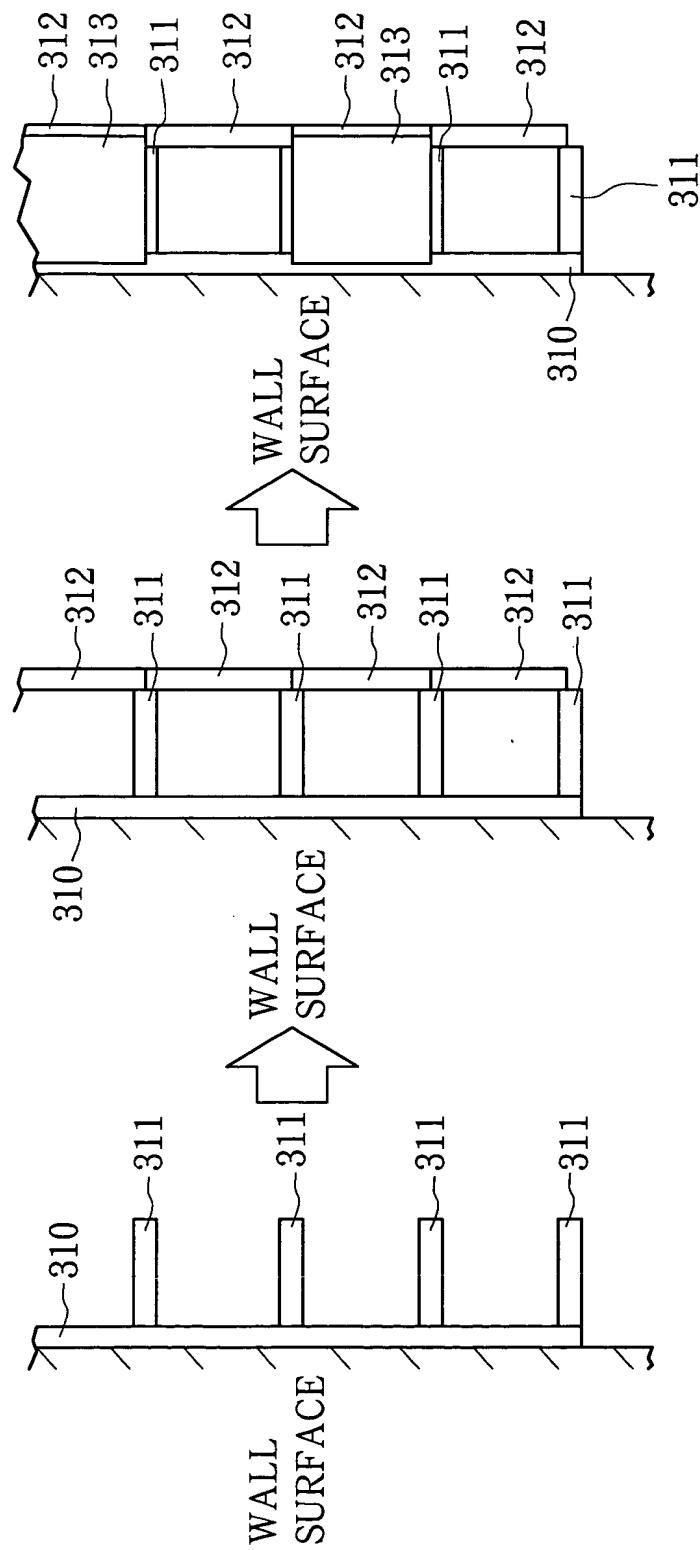
FIG. 31

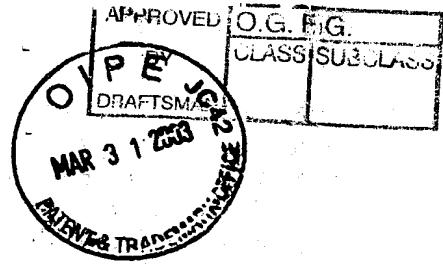




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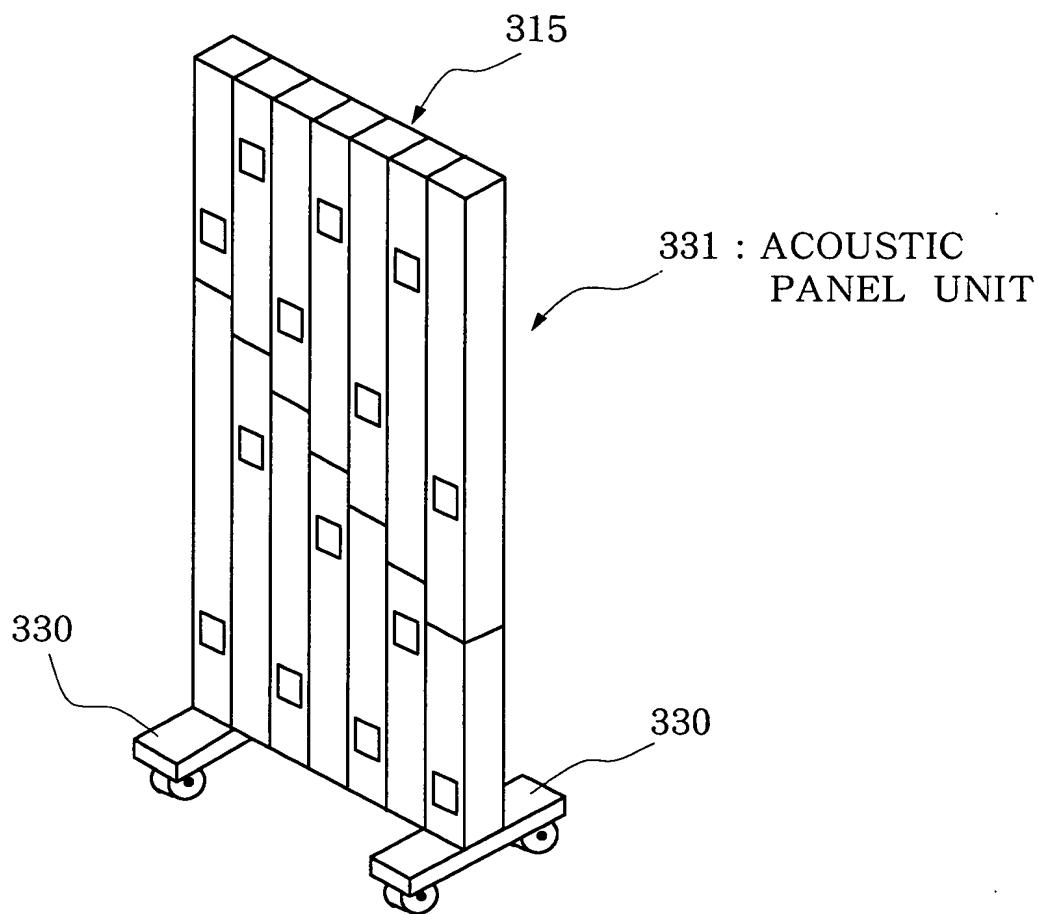
FIG. 32

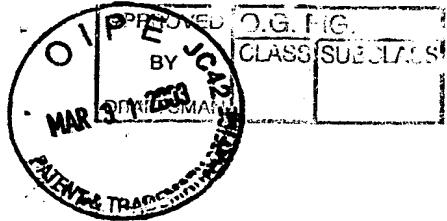




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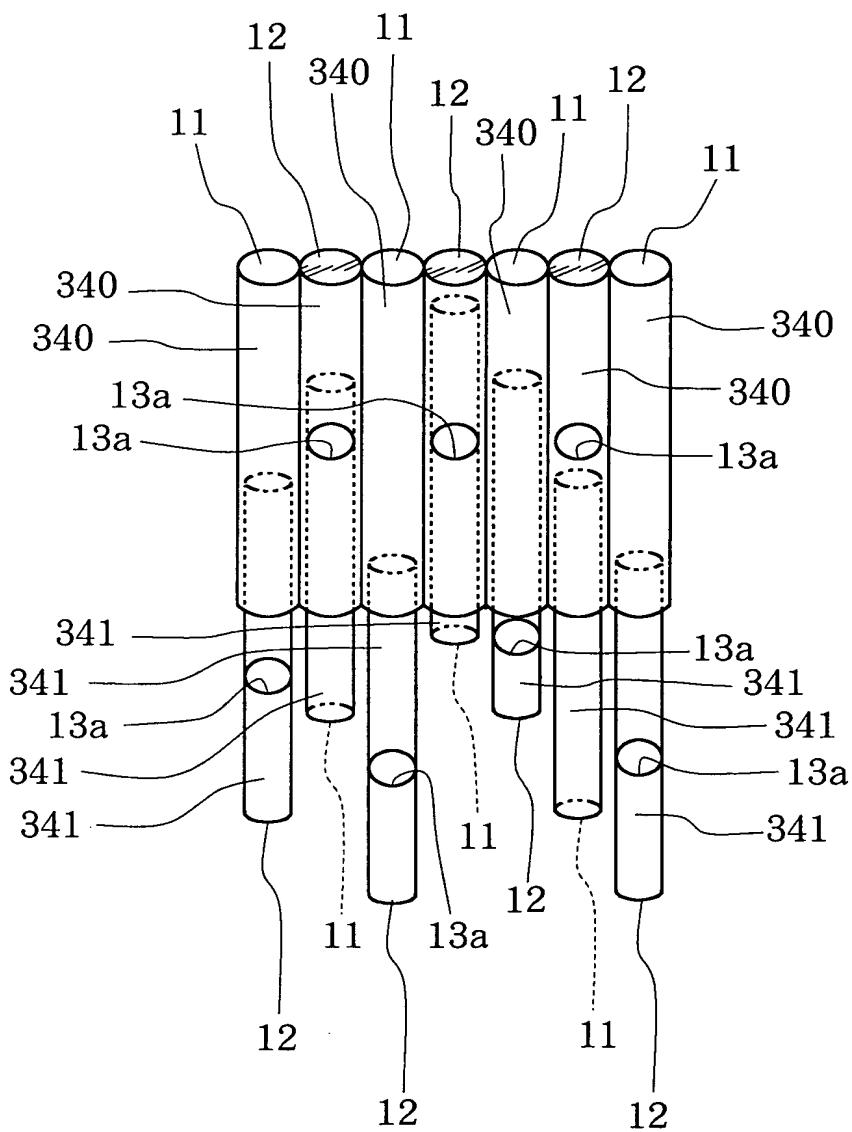
FIG. 33

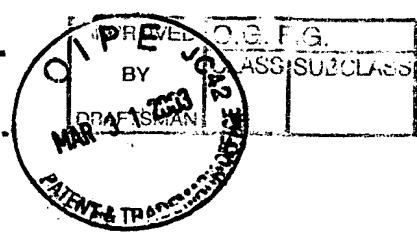




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FIG. 34





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FIG. 35 (A)

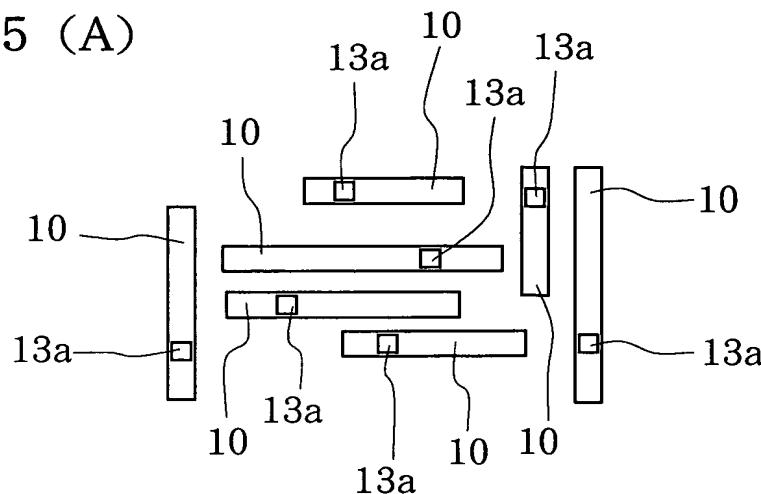


FIG. 35 (B)

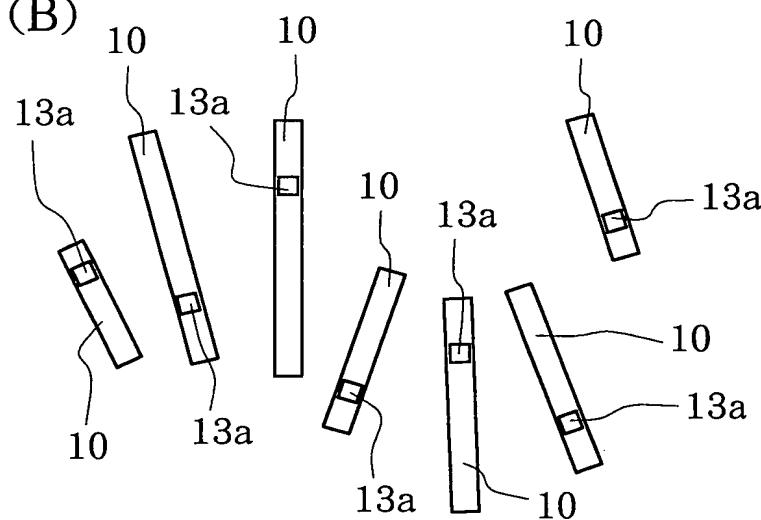
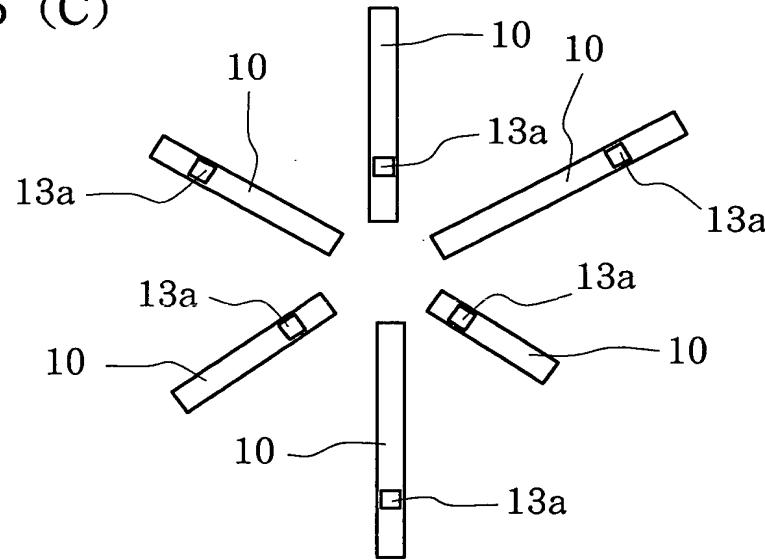
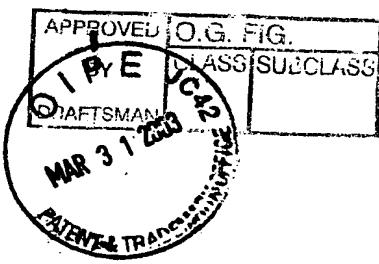


FIG. 35 (C)





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FIG. 36

